

1 ABSTRACT OF THE DISCLOSURE

2 In but one aspect of the invention, a method of depositing
3 polysilicon comprises providing a substrate within a chemical vapor
4 deposition reactor, with the substrate having an exposed substantially
5 crystalline region and an exposed substantially amorphous region. A
6 gaseous precursor comprising silicon is fed to the chemical vapor
7 deposition reactor under conditions effective to substantially selectively
8 deposit polysilicon on the crystalline region and not the amorphous
9 region. In another aspect a method of fabricating a field effect
10 transistor on a substrate comprises forming a gate dielectric layer and
11 a gate over semiconductive material. Doped source/drain regions are
12 formed within semiconductive material laterally proximate the gate.
13 Substantially amorphous insulating material is formed over and laterally
14 proximate the gate. The substrate is provided within a chemical vapor
15 deposition reactor. A gaseous precursor comprising silicon is fed to the
16 chemical vapor deposition reactor under conditions effective to
17 substantially selectively deposit polysilicon on the source/drain regions
18 and not on substantially amorphous material, and forming elevated
19 source/drains on the doped source/drain regions. In but another aspect,
20 a method of forming a contact to a substrate is disclosed. A contact
21 opening is etched through amorphous insulating material over a node
22 location ultimately comprising an outwardly exposed substantially
23 crystalline surface. Within a chemical vapor deposition reactor, a
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1 gaseous precursor comprising silicon is provided under conditions
2 effective to substantially selectively deposit polysilicon on the outwardly
3 exposed crystalline node location surface and not on the insulating
4 material. Capacitor forming methods are also disclosed.
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